


```

SSSSSSSS  AAAAAA  TTTTTTTTTT  SSSSSSSS  SSSSSSSS  SSSSSSSS  000000  888888
SSSSSSSS  AAAAAA  TTTTTTTTTT  SSSSSSSS  SSSSSSSS  SSSSSSSS  000000  888888
SS        AA      AA      TT        SS        SS        SS        00        00      88      88
SS        AA      AA      TT        SS        SS        SS        00        00      88      88
SS        AA      AA      TT        SS        SS        SS        00        00      88      88
SS        AA      AA      TT        SS        SSSSSS  SSSSSS  00        0000  88      88
SSSSSSS  AA      AA      TT        SSSSSS  SSSSSS  SSSSSS  00        0000  888888
SS        AA      AA      TT        SS        SSSSSS  SS        00        00      88      88
SS        AAAAAA  AA      TT        SS        SSSSSS  SS        0000  00      88      88
SS        AAAAAA  AA      TT        SS        SSSSSS  SS        0000  00      88      88
SS        AA      AA      TT        SSSSSS  SS        00      00      88      88
SSSSSSSS  AA      AA      TT        SSSSSSSS  SSSSSSSS  SSSSSSSS  000000  888888
SSSSSSSS  AA      AA      TT        SSSSSSSS  SSSSSSSS  SSSSSSSS  000000  888888

LL        IIIIII  SSSSSSSS
LL        IIIIII  SSSSSSSS
LL        II      SS
LL        II      SS
LL        II      SS
LL        II      SSSSSS
LL        II      SSSSSS
LL        II      SS
LL        II      SS
LL        II      SS
LL        II      SS
LLLLLLLLLL  IIIIII  SSSSSSSS
LLLLLLLLLL  IIIIII  SSSSSSSS

```

(1)	54	DECLARATIONS
(1)	110	CONDITION TABLES
(1)	141	TM SETUP, TM CLEANUP
(1)	226	CONDITION SUBROUTINES - SETUP AND CLEANUP
(1)	296	FORM_CONDS
(1)	389	VERIFY
(1)	469	VFY_CLEANUP


```
0000 1 .TITLE SATSSS08 SATS SYSTEM SERVICE TESTS $BRDCST (SUCC S.C.)
0000 2 .IDENT 'V04-000'
0000 3
0000 4
0000 5 *****
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0000 24 *
0000 25 *
0000 26 *****
0000 27
0000 28
0000 29 ++
0000 30 FACILITY: SYSTST (SATS SYSTEM SERVICE TESTS)
0000 31
0000 32 ABSTRACT:
0000 33
0000 34 THIS MODULE CONTAINS SUBROUTINES WHICH, WHEN LINKED
0000 35 WITH SUCCOMMON.OBJ, FORM TEST MODULE SATSSS08 TO TEST SUCCESSFUL
0000 36 OPERATION OF THE $BRDCST SYSTEM SERVICE. THE SERVICE IS INVOKED
0000 37 UNDER VARIOUS INPUT CONDITIONS WITH VARYING INPUT PARAMETERS. ONLY
0000 38 SUCCESSFUL STATUS CODES ARE EXPECTED IN THIS TEST MODULE. CORRECT
0000 39 OPERATION OF THE SERVICE FOR EACH OF ITS ISSUANCES IS VERIFIED BY
0000 40 CHECKING FOR AN SSS NORMAL STATUS CODE, EXPECTED RETURN ARGUMENTS
0000 41 AND EXPECTED FUNCTIONALITY PERFORMED.
0000 42
0000 43 ENVIRONMENT: USER MODE IMAGE; NEEDS CMKRNL PRIVILEGE,
0000 44 DYNAMICALLY ACQUIRES OTHER PRIVILEGES, AS NEEDED.
0000 45
0000 46 AUTHOR: THOMAS L. CAFARELLA, CREATION DATE: MMM, 1978
0000 47
0000 48 MODIFIED BY:
0000 49
0000 50 : VERSION
0000 51 01 -
0000 52 --
```

SATSSS08
V04-000

SATS SYSTEM SERVICE TESTS \$BRDCST (SUCC 16-SEP-1984 00:48:01 VAX/VMS Macro V04-00 Page 2
DECLARATIONS 5-SEP-1984 04:30:06 [UETPSY.SRC]SATSSS08.MAR;1 (1)

```
0000 54 .SBTTL DECLARATIONS
0000 55 :
0000 56 : INCLUDE FILES:
0000 57 :
0000 58 $PRVDEF ; PRIVILEGE BIT DEFINITIONS
0000 59 $PHDDEF ; PROCESS HEADER OFFSETS
0000 60 $LOGDEF ; LOGICAL NAME TABLE DEFS
0000 61 $SHR_MESSAGES UETP,116,<<TEXT,INFO>> ; DEFINE UETP$_TEXT MSG
0000 62 :
0000 63 : MACROS:
0000 64 :
0000 65 :
0000 66 : EQUATED SYMBOLS:
0000 67 :
0000 68 :
0000 69 : OWN STORAGE:
0000 70 :
```



```
00000000 72 .PSECT RODATA, RD, NOWRT, NOEXE, LONG
0000 73 TEST_MOD_NAME:: STRING C, <SATSSS08> ; TEST MODULE NAME
0009 74 TEST_MOD_NAME_D: STRING I, <SATSSS08> ; TEST MODULE NAME DESCRIPTOR
0019 75 MSG1_INP_CTL: STRING I, <SSBRD!4ZW: CONDITIONS:>
0039 76 ; FAO CTL STRING FOR MSG1 IN SUCCOMMON.MAR
0039 77 MSG3_ERR_CTL:: STRING I, <*SSBRD!4ZW: !AS>
0051 78 ; FAO CTL STRING FOR MSG3 IN SUCCOMMON.MAR
0051 79 INTRO_MSG: STRING I, <THE FOLLOWING MSGS ARE PART OF THE>, -
0051 80 <$BRDCST TEST ... PLEASE IGNORE>
009A 81 EXIT_MSG: STRING I, <NO MORE $BRDCST MSGS ... THANK >, -
009A 82 <YOU FOR YOUR PATIENCE>
00D6 83 TERM_DATA: ; 250-CHARACTER MESSAGE
00D6 84 .ASCII %VAX/VMS VAX/VMS VAX/VMS %
00E2 85 .ASCII %VAX/VMS VAX/VMS VAX/VMS %
00EE 86 .ASCII %VAX/VMS VAX/VMS VAX/VMS %
00FA 87 .ASCII %VAX/VMS VAX/VMS VAX/VMS %
0106 88 .ASCII %VAX/VMS VAX/VMS VAX/VMS %
0112 89 .ASCII %VAX/VMS VAX/VMS VAX/VMS %
011E 90 .ASCII %VAX/VMS VAX/VMS VAX/VMS %
012A 91 .ASCII %VAX/VMS VAX/VMS VAX/VMS %
0136 92 .ASCII %VAX/VMS VAX/VMS VAX/VMS %
0142 93 .ASCII %VAX/VMS VAX/VMS VAX/VMS %
014E 94 .ASCII %VAX/VMS VAX/VMS VAX/VMS %
015A 95 .ASCII %VAX/VMS VAX/VMS VAX/VMS %
0166 96 .ASCII %VAX/VMS VAX/VMS VAX/VMS %
0172 97 .ASCII %VAX/VMS VAX/VMS VAX/VMS %
017E 98 .ASCII %VAX/VMS VAX/VMS VAX/VMS %
018A 99 .ASCII %VAX/VMS VAX/VMS VAX/VMS %
0196 00000000 01D0 95 ZERODESC: .LONG 0 ; ZERO LENGTH STRING DESCRIPTOR
01A2 000001D0 01D4 96 .ADDRESS ZERODESC ;
01AE 97 OPDEV: STRING I, <OPAO> ; OPER'S CONSOLE (SHOULD BE ON EVERY SYSTEM)
01BA 98 OPDEVLOG: STRING I, <SYSTST$OPER> ; LOGICAL NAME FOR OPERATOR'S CONSOLE
01C6
```

SATSSS08
V04-000

SATS SYSTEM SERVICE TESTS \$BRDCST (SUCC 16-SEP-1984 00:48:01 VAX/VMS Macro V04-00
DECLARATIONS 5-SEP-1984 04:30:06 [UETPSY.SRC]SATSSS08.MAR;1

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(1)

00000000	100	.PSECT	RWDATA,RD,WRT,NOEXE, LONG	
00000008	0000	101 PRIVMASK:	.BLKQ 1	: ADDR OF PRIVILEGE MASK (IN PHD)
0000000A	0008	102 CTRSTRLEN:	.BLKW 1	: FAO CONTROL STRING LENGTH
	000A	103 FAOCTRSTR:	STRING 0,30	: FAO CONTROL STRING
	0030	104 TERM_DESCR:		: TERMINAL DATA STRING DESCRIPTOR
00000034	0030	105	.BLKL 1	: LENGTH OF STRING
000000D6	0034	106	.ADDRESS TERM_DATA	: ADDRESS OF STRING
0000003A	0038	107 BRDLEN:	.BLKW 1	: LENGTH OF INTRO & EXIT BRDCST MSGS
	003A	108 BRDBUF:	STRING 0,80	: BUFFER FOR INTRO & EXIT BRDCST MSGS

```
0092 110 .SBTTL CONDITION TABLES
0092 111 :
0092 112 :
0092 113 :
0092 114 :
0092 115 ***** CONDITION TABLES FOR BRDCST SYSTEM SERVICE *****
0092 116 COND 1,NOTARG,<MESSAGE LENGTH>,-
0092 117 <NULL LENGTH>,-
0092 118 <MIN LENGTH>,-
0092 119 <AVG LENGTH>,-
0092 120 <MAX LENGTH>,-
FA 50 01 00 00DF 120 .BYTE 0,1,80,250
00E3 121 :
00E3 122 COND 2,NOTARG,<MESSAGE RECIPIENT SET>,-
00E3 123 <ALL TERMINALS>,-
00E3 124 <ALL TERMINALS ALLOCATED TO PROCESSES>,-
00E3 125 <A SINGLE TERMINAL (BY DEVICE NAME)>,-
00E3 126 <A SINGLE TERMINAL (BY LOGICAL NAME)>,-
00E3 127
00000000' 0184 128 .ADDRESS 0 ; ZERO ARGUMENT => ALL TERMINALS
000001D0' 0188 129 .ADDRESS ZERODESC ; ZERO LENGTH DESCR => ALL PROCESS TERMS
000001D8' 018C 130 .ADDRESS OPDEV ; OPERATOR'S CONSOLE
000001E5' 0190 131 .ADDRESS OPDEVLOG ; OPERATOR'S CONSOLE (BY LOG NAME)
0194 132 :
0194 133 COND 3,NULL
0195 134 COND 4,NULL
0195 135 COND 5,NULL
0196 136
0196 137
0197 138
00000000 139 .PSECT SATSSS08,RD,WRT,EXE
```



```
0000 141 .SBTTL TM_SETUP, TM_CLEANUP
0000 142 :++
0000 143 : FUNCTIONAL DESCRIPTION:
0000 144 :
0000 145 : TM SETUP AND TM CLEANUP ARE CALLED TO PERFORM
0000 146 : REQUIRED HOUSEKEEPING AT THE BEGINNING AND END, RESPECTIVELY, OF
0000 147 : TEST MODULE EXECUTION.
0000 148 :
0000 149 : CALLING SEQUENCE:
0000 150 :
0000 151 : BSBW TM_SETUP BSBW TM_CLEANUP
0000 152 :
0000 153 : INPUT PARAMETERS:
0000 154 :
0000 155 : NONE
0000 156 :
0000 157 : IMPLICIT INPUTS:
0000 158 :
0000 159 : NONE
0000 160 :
0000 161 : OUTPUT PARAMETERS:
0000 162 :
0000 163 : NONE
0000 164 :
0000 165 : IMPLICIT OUTPUTS:
0000 166 :
0000 167 : TM_SETUP: COND TABLE INDEX REGISTERS (R2,3,4,5,6) CLEARED;
0000 168 : ALL PRIVILEGES ACQUIRED.
0000 169 :
0000 170 : COMPLETION CODES:
0000 171 :
0000 172 : EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
0000 173 :
0000 174 : SIDE EFFECTS:
0000 175 :
0000 176 : SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
0000 177 : (VIA RSB) IF ERROR ENCOUNTERED.
0000 178 :
0000 179 :--
0000 180 :
0000 181 :
0000 182 :
0000 183 TM_SETUP::
0000 184 CLRL R2 ; INITIALIZE
0000 185 CLRL R3 ; .. CONDITION
0000 186 CLRL R4 ; .... TABLE
0000 187 CLRL R5 ; ..... INDEX
0000 188 CLRL R6 ; ..... REGISTERS
0000 189 BSBW MOD MSG PRINT ; PRINT TEST MODULE BEGIN MSG
0000 190 MOVAL TEST_MOD_SUCC,TMD_ADDR ; ASSUME END MSG WILL SHOW SUCCESS
0000 191 INSV #SUCCESS,#0,#3,MOD_MSG_CODE ; ADJUST STATUS CODE FOR SUCCESS
0000 192
0000 193 MODE TO,5$,KRNL ; KERNEL MODE TO ACCESS PHD
0000 194 MOVL @#CTL$GL_PHD,R9 ; GET PROCESS HEADER ADDRESS
0000 195 MOVAL PHD$Q_PRIVMSK(R9),PRIVMASK ; GET PRIV MASK ADDRESS
0000 196 MODE FROM,5$ ; BACK TO USER MODE
0000 197 PRIV ADD,ALL ; GET ALL PRIVILEGES
```

52 D4 0000 184
53 D4 0002 185
54 D4 0004 186
55 D4 0006 187
56 D4 0008 188
FFF3' 30 000A 189
00000000'EF 00000000'EF DE 000D 190
03 00 00000000'8F FO 0018 191
00000000'EF 0020
59 00000000'9F DO 0048 192
00000000'EF 69 DE 004F 193
0056 194
0057 195
0057 196

```
0077 197 $SETPRN_S TEST_MOD_NAME_D ; SET PROCESS NAME
0084 198 SS_CHECK NORMAL ; CHECK STATUS CODE RETURNED FROM SETPRN
00B2 199 $CRELOG_S LOGNAM=OPDEVLOG, EQLNAM=OPDEV -
00B2 200 TBLFLG=#LOG$C_PROCESS ; CREATE LOG NAME FOR OPERATOR'S CONSOLE
2E 50 EB 00C9 201 BLBS RO,10$ ; KEEP GOING IF SUCCESS RETURN
00CC 202 SS_CHECK NORMAL ; OTHERWISE USE SS_CHECK TO TERMINATE MODULE
00FA 203 10$:
00FA 204 $GETMSG_S MSGID=#UETPS_TEXT,MSGLEN=CTRSTRLEN, -
00FA 205 BUFADR=FAOCTRSTR ; GET UETPS_TEXT MSG
0117 206 SS_CHECK NORMAL ; CHECK FOR NORMAL RETURN
0000000A'EF 00000008'EF 3C 0145 207 MOVZWL CTRSTRLEN,FAOCTRSTR ; GET ACTUAL LEN OF MSG INTO DESCRIPTOR
0150 208 $FAO_S CTRSTR=FAOCTRSTR, OUTLEN=BRDLEN, -
0150 209 OUTBUF=BRDBUF, P1=#INTRO_MSG ; FORMAT INTRO MSG
0000003A'EF 00000038'EF 3C 016F 210 SS_CHECK NORMAL ; MAKE SURE IT WORKED
019D 211 MOVZWL BRDLEN,BRDBUF ; GET ACTUAL BUFFER LEN INTO DESCRIPTOR
01A8 212 $BRDCST_S MSGBUF=BRDBUF ; SEND INTRO MSG TO ALL TERMINALS
01BB 213 SS_CHECK NORMAL ; AND CHECK ITS RETURN
05 01E9 214 RSB ; RETURN TO MAIN ROUTINE
0000003A'EF 50 8F 9A 01EA 215 TM_CLEANUP::
01EA 216 MOVZBL #80,BRDBUF ; MAKE SURE BUFFER HAS ITS MAX LENGTH
01F2 217 $FAO_S CTRSTR=FAOCTRSTR, OUTLEN=BRDLEN, -
01F2 218 OUTBUF=BRDBUF, P1=#EXIT_MSG ; FORMAT EXIT MSG
0000003A'EF 00000038'EF 3C 0211 219 MOVZWL BRDLEN,BRDBUF ; GET ACTUAL BUFFER LENGTH INTO DESCRIPTOR
021C 220 $BRDCST_S MSGBUF=BRDBUF ; SEND EXIT MSG TO ALL TERMINALS
022F 221 $DELLOG_S LOGNAM=OPDEVLOG, - ; DELETE LOGICAL NAME CREATED EARLIER
022F 222 TBLFLG=#LOG$C_PROCESS
FDBD' 30 0240 223 BSBW MOD_MSG_PRINT ; PRINT TEST MODULE END MSG
05 0243 224 RSB ; RETURN TO MAIN ROUTINE
```

```
0244 226 .SBTTL CONDITION SUBROUTINES - SETUP AND CLEANUP
0244 227 :++
0244 228 : FUNCTIONAL DESCRIPTION:
0244 229 :
0244 230 : COND1 AND COND1_CLEANUP ARE SUBROUTINES WHICH ARE EXECUTED
0244 231 : BEFORE AND AFTER THE VERIFY SUBROUTINE, RESPECTIVELY, WHENEVER A NEW
0244 232 : CONDITION X VALUE IS SELECTED (SEE FUNCTIONAL DESCRIPTION OF SUCCOMMON
0244 233 : ROUTINE IN SUCCOMMON.MAR). ANY SETUP FUNCTION PARTICULAR TO THE
0244 234 : CONDITION X TABLE IS INCLUDED IN THE COND1 SUBROUTINE AND CLEANED
0244 235 : UP, IF NECESSARY, IN THE COND1_CLEANUP SUBROUTINE. THIS INCLUDES,
0244 236 : ESPECIALLY, CODE TO DETECT CONFLICTS AMONG CURRENT ENTRIES IN TWO
0244 237 : OR MORE CONDITION TABLES. IF A CONFLICT IS DETECTED, A NON-ZERO
0244 238 : VALUE IS STORED INTO CONFLICT, WHICH CAUSES THE CALLING ROUTINE
0244 239 : (SUCCOMMON) TO SKIP THE CURRENT ENTRY IN THE CONDITION X TABLE.
0244 240 :
0244 241 : CALLING SEQUENCE:
0244 242 :
0244 243 : BSBW COND1 BSBW COND1_CLEANUP
0244 244 : WHERE X = 1,2,3,4,5
0244 245 :
0244 246 : INPUT PARAMETERS:
0244 247 :
0244 248 : CONFLICT = 0
0244 249 :
0244 250 : IMPLICIT INPUTS:
0244 251 :
0244 252 : R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
0244 253 : FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
0244 254 :
0244 255 : OUTPUT PARAMETERS:
0244 256 :
0244 257 : CONFLICT SET TO NON-ZERO IF COND TABLE CONFLICT DETECTED.
0244 258 :
0244 259 : IMPLICIT OUTPUTS:
0244 260 :
0244 261 : R2,3,4,5,6 PRESERVED
0244 262 :
0244 263 : COMPLETION CODES:
0244 264 :
0244 265 : NONE
0244 266 :
0244 267 : SIDE EFFECTS:
0244 268 :
0244 269 : NONE
0244 270 :
0244 271 :--
0244 272 :
0244 273 :
0244 274 :
05 0244 275 COND1::
0244 276 RSB ; RETURN TO MAIN ROUTINE
05 0245 277 COND1_CLEANUP::
0245 278 RSB ; RETURN TO MAIN ROUTINE
05 0246 279 COND2::
0246 280 RSB ; RETURN TO MAIN ROUTINE
05 0247 281 COND2_CLEANUP::
0247 282 RSB ; RETURN TO MAIN ROUTINE
```


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V04-000

N 14
SATS SYSTEM SERVICE TESTS \$BRDCST (SUCC 16-SEP-1984 00:48:01 VAX/VMS Macro V04-00
CONDITION SUBROUTINES - SETUP AND CLEANU 5-SEP-1984 04:30:06 [UETPSY.SRC]SATSSS08.MAR;1

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(1)

	0248	283	COND3::		
05	0248	284	RSB		; RETURN TO MAIN ROUTINE
	0249	285	COND3_CLEANUP::		
05	0249	286	RSB		; RETURN TO MAIN ROUTINE
	024A	287	COND4::		
05	024A	288	RSB		; RETURN TO MAIN ROUTINE
	024B	289	COND4_CLEANUP::		
05	024B	290	RSB		; RETURN TO MAIN ROUTINE
	024C	291	COND5::		
05	024C	292	RSB		; RETURN TO MAIN ROUTINE
	024D	293	COND5_CLEANUP::		
05	024D	294	RSB		; RETURN TO MAIN ROUTINE

```
024E 296 .SBTTL FORM_CONDS
024E 297 ++
024E 298 FUNCTIONAL DESCRIPTION:
024E 299
024E 300 FORM_CONDS FORMATS AND PRINTS INFORMATION ABOUT
024E 301 THE CURRENT ELEMENT IN EACH OF THE CONDITION TABLES.
024E 302
024E 303 CALLING SEQUENCE:
024E 304
024E 305 BSBW FORM_CONDS
024E 306
024E 307 INPUT PARAMETERS:
024E 308
024E 309 NONE
024E 310
024E 311 IMPLICIT INPUTS:
024E 312
024E 313 R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
024E 314 FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
024E 315 FOR X = 1,2,3,4,5 :
024E 316 CONDX_T - TITLE TEXT FOR CONDX TABLE
024E 317 CONDX_TAB - ELEMENT TEXT FOR CONDX TABLE
024E 318 CONDX_C - CONTEXT OF THE CONDX TABLE
024E 319 CONDX_E - DATA ELEMENTS OF THE CONDX TABLE
024E 320
024E 321 OUTPUT PARAMETERS:
024E 322
024E 323 NONE
024E 324
024E 325 IMPLICIT OUTPUTS:
024E 326
024E 327 NONE
024E 328
024E 329 COMPLETION CODES:
024E 330
024E 331 NONE
024E 332
024E 333 SIDE EFFECTS:
024E 334
024E 335 NONE
024E 336
024E 337 --
024E 338
024E 339
024E 340
024E 341 FORM_CONDS::
024E 342 $FAO_S MSG1_INP_CTL,FAO_LEN,FAO_DESC,TESTNUM
024E 343
024E 344 BSBW OUTPUT_MSG ; FORMAT CONDITIONS HEADER MSG
024E 345 CMPB #COND1_C,#NULL ; ... AND PRINT IT
024E 346 BNEQU 10$ ; IS CONDITION 1 NULL ?
024E 347 BRW FORM_CONDSX ; NO -- CONTINUE
024E 348 10$: ; YES -- SUBROUTINE IS FINISHED
024E 349 MOVAL COND1_T,MSG_A ; SAVE ADDRESS OF CONDITION 1 TITLE FOR FAO
024E 350 MOVL COND1_TAB[R2],MSG_B ; SAVE ADDR OF COND 1 CURR TEXT ELT FOR FAO
024E 351 MOVB #COND1_C,MSG_TXT ; SAVE CONDITION 1 CONTEXT FOR FAO
024E 352 MOV_VAL COND1_C,COND1_E[R2],MSG_DATA1 ; GIVE COND 1 DATA VALUE TO FAO
```

00000000'EF	00000092'EF	DE	0278	349
00000000'EF	000000A2'EF	DO	0283	350
00000000'EF	00	90	028F	351

FD90'	30	026D	343
14 00	91	026D	344
03	12	0270	345
00BF	31	0273	346
		0275	347
		0278	348

```

      FD67' 30 0296 353      BSBW WRITE_MSG2      : FORMAT AND WRITE CONDITION 1 MSG
      14 00 91 0299 354      CMPB #COND2_C,#NULL      : IS CONDITION 2 NULL ?
      03 12 029C 355      BNEQU 20$      : NO -- CONTINUE
      0096 31 029E 356      BRW FORM_CONDSX      : YES -- SUBROUTINE IS FINISHED
      02A1 357 20$:
00000000'EF 000000E3'EF DE 02A1 358      MOVAL COND2_T,MSG_A      : SAVE ADDRESS OF CONDITION 2 TITLE FOR FAO
00000000'EF 000000FA'EF43 D0 02AC 359      MOVL COND2_TAB[R3],MSG_B      : SAVE ADDR OF COND 2 CURR TEXT ELT FOR FAO
      00000000'EF 00 90 02B8 360      MOVB #COND2_C,MSG_TXT      : SAVE CONDITION 2 CONTEXT FOR FAO
      02BF 361      MOV VAL COND2_C,COND2_E[R3],MSG_DATA1 : GIVE COND 2 DATA VALUE TO FAO
      FD3E' 30 02BF 362      BSBW WRITE_MSG2      : FORMAT AND WRITE CONDITION 2 MSG
      14 14 91 02C2 363      CMPB #COND3_C,#NULL      : IS CONDITION 3 NULL ?
      03 12 02C5 364      BNEQU 30$      : NO -- CONTINUE
      006D 31 02C7 365      BRW FORM_CONDSX      : YES -- SUBROUTINE IS FINISHED
      02CA 366 30$:
00000000'EF 00000194'EF DE 02CA 367      MOVAL COND3_T,MSG_A      : SAVE ADDRESS OF CONDITION 3 TITLE FOR FAO
00000000'EF 00000194'EF44 D0 02D5 368      MOVL COND3_TAB[R4],MSG_B      : SAVE ADDR OF COND 3 CURR TEXT ELT FOR FAO
      00000000'EF 14 90 02E1 369      MOVB #COND3_C,MSG_TXT      : SAVE CONDITION 3 CONTEXT FOR FAO
      02E8 370      MOV VAL COND3_C,COND3_E[R4],MSG_DATA1 : GIVE COND 3 DATA VALUE TO FAO
      FD15' 30 02E8 371      BSBW WRITE_MSG2      : FORMAT AND WRITE CONDITION 3 MSG
      14 14 91 02EB 372      CMPB #COND4_C,#NULL      : IS CONDITION 4 NULL ?
      47 13 02EE 373      BEQU FORM_CONDSX      : YES -- SUBROUTINE IS FINISHED
00000000'EF 00000195'EF DE 02F0 374      MOVAL COND4_T,MSG_A      : SAVE ADDRESS OF CONDITION 4 TITLE FOR FAO
00000000'EF 00000195'EF45 D0 02FB 375      MOVL COND4_TAB[R5],MSG_B      : SAVE ADDR OF COND 4 CURR TEXT ELT FOR FAO
      00000000'EF 14 90 0307 376      MOVB #COND4_C,MSG_TXT      : SAVE CONDITION 4 CONTEXT FOR FAO
      030E 377      MOV VAL COND4_C,COND4_E[R5],MSG_DATA1 : GIVE COND 4 DATA VALUE TO FAO
      FCE' 30 030E 378      BSBW WRITE_MSG2      : FORMAT AND WRITE CONDITION 4 MSG
      14 14 91 0311 379      CMPB #COND5_C,#NULL      : IS CONDITION 5 NULL ?
      21 13 0314 380      BEQU FORM_CONDSX      : YES -- SUBROUTINE IS FINISHED
00000000'EF 00000196'EF DE 0316 381      MOVAL COND5_T,MSG_A      : SAVE ADDRESS OF CONDITION 5 TITLE FOR FAO
00000000'EF 00000196'EF46 D0 0321 382      MOVL COND5_TAB[R6],MSG_B      : SAVE ADDR OF COND 5 CURR TEXT ELT FOR FAO
      00000000'EF 14 90 032D 383      MOVB #COND5_C,MSG_TXT      : SAVE CONDITION 5 CONTEXT FOR FAO
      0334 384      MOV VAL COND5_C,COND5_E[R6],MSG_DATA1 : GIVE COND 5 DATA VALUE TO FAO
      FCC9' 30 0334 385      BSBW WRITE_MSG2      : FORMAT AND WRITE CONDITION 5 MSG
      0337 386 FORM_CONDSX:
      05 0337 387      RSB      : RETURN TO CALLER
```



```
0338 389 .SBTTL VERIFY
0338 390
0338 391 ++
0338 392 FUNCTIONAL DESCRIPTION:
0338 393
0338 394 VERIFY IS CALLED ONCE FOR EACH COMBINATION OF CONDITION
0338 395 TABLE VALUES (AS DETERMINED BY THE INDEX REGISTERS R2,3,4,5,6 FOR
0338 396 COND TABLES 1,2,3,4,5, RESPECTIVELY). VERIFY ESTABLISHES THE CONDITIONS
0338 397 SPECIFIED BY THE COND TABLES AND ISSUES THE SUBJECT SYSTEM SERVICE
0338 398 ($BRDCST). THEN, THE SUCCESSFUL OPERATION OF THE SERVICE IS VERIFIED
0338 399 BY EXAMINING THE STATUS CODE RETURNED, THE VALUES FOR RETURN ARGUMENTS
0338 400 AND THE FUNCTIONALITY PERFORMED. THE EXAMINATIONS TAKE THE FORM OF
0338 401 COMPARISONS AGAINST EXPECTED VALUES. ANY FAILING COMPARISON CAUSES AN
0338 402 ERR_EXIT MACRO TO BE EXECUTED (EITHER DIRECTLY, OR INDIRECTLY,
0338 403 THROUGH THE SS_CHECK MACRO); ERR_EXIT SETS EFLAG TO NON-ZERO,
0338 404 PRINTS ERROR MESSAGES AND CAUSES AN IMMEDIATE RSB TO CALLER.
0338 405 WHEN ERR_EXIT IS EXECUTED, FURTHER CALLS TO VERIFY ARE SUPPRESSED,
0338 406 AND, AFTER EXECUTING CLEANUP SUBROUTINES, THE IMAGE EXITS.
0338 407
0338 408 CALLING SEQUENCE:
0338 409
0338 410 BSBW VERIFY
0338 411
0338 412 INPUT PARAMETERS:
0338 413
0338 414 NONE
0338 415
0338 416 IMPLICIT INPUTS:
0338 417
0338 418 R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
0338 419 FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
0338 420 FOR X = 1,2,3,4,5 :
0338 421 CONDX_E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
0338 422 TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
0338 423 ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
0338 424 FOR CONDX_E.
0338 425
0338 426 OUTPUT PARAMETERS:
0338 427
0338 428 NONE
0338 429
0338 430 IMPLICIT OUTPUTS:
0338 431
0338 432 VERIFY HAS NO OUTPUT. SINCE ITS PURPOSE IS TO TEST FOR ERRORS,
0338 433 IT MERELY RETURNS TO CALLER NORMALLY AFTER THE TESTS, PROVIDING
0338 434 ALL WERE SUCCESSFUL; IF AN ERROR IS DISCOVERED, RETURN IS VIA
0338 435 AN ERR_EXIT OR SS_CHECK MACRO, BOTH OF WHICH DOCUMENT DETECTED
0338 436 ERRORS.
0338 437
0338 438 COMPLETION CODES:
0338 439
0338 440 EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
0338 441
0338 442 SIDE EFFECTS:
0338 443
0338 444 SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
0338 445 (VIA RSB) IF ERROR ENCOUNTERED.
```

```
0338 446 ;--
0338 447
0338 448
0338 449
0338 450 VERIFY::
0338 451 TSTB CFLAG ; SHOULD CONDITIONS BE PRINTED ?
033E 452 BEQL $$ ; NO -- CONTINUE
0340 453 BSBW FORM_CONDS ; YES -- FMT & PRINT ALL CONDS FOR THIS T.C.
0343 454 $$:
0343 455 MOVZBL COND1_E[R2],TERM_DESCR ; GET LENGTH INTO DESCRIPTOR
034F 456 MOVL COND2_E[R3],R9 ; GET DEVNAM ARG INTO REG FOR INDIRECT REF
0357 457 :
0357 458 : ***** SYSTEM SERVICE CALL WHICH IS THE SUBJECT OF THIS TEST CASE *****
0357 459 :
0357 460 $BRDCST,S MSGBUF=TERM_DESCR, DEVNAM=(R9)
036A 461 CMPL -R0,#SS$_NORMAL ; CODE RECEIVED = CODE EXPECTED ?
0371 462 BEQLU VERIFYX ; YES -- CONTINUE
0373 463 MOVL #SS$_NORMAL,EXPV ; NO -- LOAD UP EXPECTED AND
037E 464 MOVL R0,RECV ; ... RECEIVED VALUES, THEN EXIT
0385 465 ERR_EXIT LONG,<INCORRECT STATUS CODE RETURNED FROM BRDCST>
03D4 466 VERIFYX:
03D4 467 RSB ; RETURN TO CALLER
```

00000000'EF 95 0338 451
03 13 033E 452
FF0B 30 0340 453
00000030'EF 000000DF'EF42 9A 0343 454
59 00000184'EF43 D0 034F 456
0357 457
0357 458
0357 459
0357 460
00000000'8F 50 D1 036A 461
61 13 0371 462
00000000'EF 00000000'8F D0 0373 463
00000000'EF 50 D0 037E 464
0385 465
03D4 466
05 03D4 467

```
03D5 469 .SBTTL VFY_CLEANUP
03D5 470 :++
03D5 471 : FUNCTIONAL DESCRIPTION:
03D5 472 :
03D5 473 : VFY_CLEANUP EXECUTES SYSTEM SERVICES TO UNDO THE
03D5 474 : EFFECT OF THOSE ISSUED IN THE VERIFY SUBROUTINE. VFY_CLEANUP MUST
03D5 475 : ASSUME THAT VERIFY MAY NOT HAVE EXECUTED IN ITS ENTIRETY (IF AN
03D5 476 : ERROR IS FOUND). ALSO, VFY_CLEANUP MAY ISSUE SS_CHECK OR ERR_EXIT
03D5 477 : ONLY AFTER PERFORMING ALL OF ITS CLEANUP OPERATIONS; THIS IS REQUIRED
03D5 478 : IN THE EVENT THAT VFY_CLEANUP IS CALLED DURING ERROR PROCESSING,
03D5 479 : WHEN PERFORMING THE REQUIRED CLEANUP IS MORE IMPORTANT THAN
03D5 480 : POSSIBLY DISCOVERING A SECOND ERROR.
03D5 481 :
03D5 482 : CALLING SEQUENCE:
03D5 483 :
03D5 484 : BSBW VFY_CLEANUP
03D5 485 :
03D5 486 : INPUT PARAMETERS:
03D5 487 :
03D5 488 : NONE
03D5 489 :
03D5 490 : IMPLICIT INPUTS:
03D5 491 :
03D5 492 : R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
03D5 493 : FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
03D5 494 : FOR X = 1,2,3,4,5 :
03D5 495 : CONDX_E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
03D5 496 : TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
03D5 497 : ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
03D5 498 : FOR CONDX_E.
03D5 499 :
03D5 500 : OUTPUT PARAMETERS:
03D5 501 :
03D5 502 : NONE
03D5 503 :
03D5 504 : IMPLICIT OUTPUTS:
03D5 505 :
03D5 506 : NONE
03D5 507 :
03D5 508 : COMPLETION CODES:
03D5 509 :
03D5 510 : EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
03D5 511 :
03D5 512 : SIDE EFFECTS:
03D5 513 :
03D5 514 : SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
03D5 515 : (VIA RSB) IF ERROR ENCOUNTERED.
03D5 516 :
03D5 517 : --
03D5 518 :
03D5 519 :
03D5 520 :
05 03D5 521 VFY_CLEANUP::
03D5 522 RSB
03D5 523 .END ; RETURN TO CALLER
```


SATSSS08
Symbol table

SATS SYSTEM SERVICE TESTS \$BRDCST (SUCC 16-SEP-1984 00:48:01 VAX/VMS Macro V04-00
5-SEP-1984 04:30:06 [UETPSY.SRC]SATSSS08.MAR;1

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(1)

\$\$\$\$	= 0000038F	R	04	FAOCTRSTR	0000000A	R	03
\$\$\$CHARS	= 0000002A			FAO_DESC	*****	X	04
\$\$\$CHARS1	= 00000000			FAO_LEN	*****	X	04
\$\$\$CHARS2	= 00000024			FORM_CONDS	0000024E	RG	04
\$\$\$CHARS3	= 00000022			FORM_CONDSX	00000337	R	04
\$\$\$CHARS4	= 00000023			INTRO_MSG	00000051	R	02
\$\$\$CHARS5	= 00000000			LOG\$C_PROCESS	= 00000002		
\$\$\$COND_A	= 00000003			LONG	= 00000004	G	
\$\$\$STRINGS	= 00000001			MOD_MSG_CODE	*****	X	04
\$\$\$STRINGS2	= 00000005			MOD_MSG_PRINT	*****	X	04
\$\$T1	= 00000000			MSGT_INP_CTL	00000019	R	02
\$\$T2	= 00000004			MSG3_ERR_CTL	00000039	RG	02
BRDBUF	0000003A	R	03	MSG_A	*****	X	04
BRDLEN	00000038	R	03	MSG_B	*****	X	04
BYTE	= 00000001	G		MSG_CTXT	*****	X	04
CFLAG	*****	X	04	NOTARG	= 00000000	G	
CHMRTN	*****	X	04	NULL	= 00000014	G	
CHM_CONT	*****	X	04	OPDEV	000001D8	R	02
COMP_SC	*****	X	04	OPDEVLOG	000001E5	R	02
COND1	00000244	RG	04	OUTPUT_MSG	*****	X	04
COND1_C	= 00000000			PCV	*****	X	04
COND1_CLEANUP	00000245	RG	04	PHDSQ_PRIVMSK	= 00000000		
COND1_E	000000DF	R	03	PRIVMASK	00000000	R	03
COND1_H	000000A1	RG	03	PRIV_ARGS	= 00000002		
COND1_T	00000092	R	03	PROCESS_ERR	*****	X	04
COND1_TAB	000000A2	R	03	QUAD	= 00000008	G	
COND2	00000246	RG	04	RECV	*****	X	04
COND2_C	= 00000000			REST_REGS	*****	X	04
COND2_CLEANUP	00000247	RG	04	SAVE_REGS	*****	X	04
COND2_E	00000184	R	03	SHR\$K_SHRDEF	= 00000001		
COND2_H	000000F9	RG	03	SHR\$ TEXT	= 00001130		
COND2_T	000000E3	R	03	SS\$ NORMAL	*****	X	04
COND2_TAB	000000FA	R	03	SUCCESS	*****	X	04
COND3	00000248	RG	04	SYSSBRDCST	*****	GX	04
COND3_C	= 00000014			SYSSCMKRNL	*****	GX	04
COND3_CLEANUP	00000249	RG	04	SYSSCRELOG	*****	GX	04
COND3_H	00000194	RG	03	SYSSDELLOG	*****	GX	04
COND3_T	00000194	R	03	SYSSFAO	*****	X	04
COND3_TAB	00000194	R	03	SYSSGETMSG	*****	GX	04
COND4	0000024A	RG	04	SYSSSETPRN	*****	GX	04
COND4_C	= 00000014			SYSSSETPRV	*****	GX	04
COND4_CLEANUP	0000024B	RG	04	TERM_DATA	000000D6	R	02
COND4_H	00000195	RG	03	TERM_DESCR	00000030	R	03
COND4_T	00000195	R	03	TESTNUM	*****	X	04
COND4_TAB	00000195	R	03	TEST_MOD_NAME	00000000	RG	02
COND5	0000024C	RG	04	TEST_MOD_NAME_D	00000009	R	02
COND5_C	= 00000014			TEST_MOD_SUCC	*****	X	04
COND5_CLEANUP	0000024D	RG	04	TMD_ADDR	*****	X	04
COND5_H	00000196	RG	03	TM_CLEANUP	000001EA	RG	04
COND5_T	00000196	R	03	TM_SETUP	00000000	RG	04
COND5_TAB	00000196	R	03	UETPS TEXT	= 00741133		
CTL\$GC_PHD	*****	X	04	VERIFY	00000338	RG	04
CTRSTRLEN	00000008	R	03	VERIFYX	000003D4	R	04
DESC	= 00000010	G		VFY_CLEANUP	000003D5	RG	04
EFLAG	*****	X	04	WORD	= 00000002	G	
EXIT_MSG	0000009A	R	02	WRITE_MSG2	*****	X	04
EXPV	*****	X	04	ZERODESC	000001D0	R	02

+-----+
! Psect synopsis !
+-----+

PSECT name	Allocation	PSECT No.	Attributes
. ABS .	00000000 (0.)	00 (0.)	NOPIC USR CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE
\$AB\$\$	00000000 (0.)	01 (1.)	NOPIC USR CON ABS LCL NOSHR EXE RD WRT NOVEC BYTE
RODATA	000001F8 (504.)	02 (2.)	NOPIC USR CON REL LCL NOSHR NOEXE RD NOWRT NOVEC LONG
RWDATA	00000197 (407.)	03 (3.)	NOPIC USR CON REL LCL NOSHR NOEXE RD WRT NOVEC LONG
SATSSS08	000003D6 (982.)	04 (4.)	NOPIC USR CON REL LCL NOSHR EXE RD WRT NOVEC BYTE

+-----+
! Performance indicators !
+-----+

Phase	Page faults	CPU Time	Elapsed Time
Initialization	35	00:00:00.06	00:00:00.28
Command processing	132	00:00:00.62	00:00:01.72
Pass 1	266	00:00:07.80	00:00:15.28
Symbol table sort	0	00:00:00.61	00:00:00.84
Pass 2	110	00:00:01.95	00:00:04.26
Symbol table output	14	00:00:00.10	00:00:00.13
Psect synopsis output	2	00:00:00.03	00:00:00.03
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	561	00:00:11.18	00:00:22.55

The working set limit was 1500 pages.
40969 bytes (81 pages) of virtual memory were used to buffer the intermediate code.
There were 30 pages of symbol table space allocated to hold 431 non-local and 26 local symbols.
523 source lines were read in Pass 1, producing 23 object records in Pass 2.
41 pages of virtual memory were used to define 31 macros.

+-----+
! Macro library statistics !
+-----+

Macro library name	Macros defined
-\$255\$DUA28:[SHRLIB]UETP.MLB;1	10
-\$255\$DUA28:[SYS.OBJ]LIB.MLB;1	2
-\$255\$DUA28:[SYSLIB]STARLET.MLB;2	16
TOTALS (all libraries)	28

806 GETS were required to define 28 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS\$:SATSSS08/OBJ=OBJ\$:SATSSS08 MSRC\$:SATSSS08/UPDATE=(ENH\$:SATSSS08)+EXECML\$/LIB+SHRLIB\$:UETP/LIB

0421 AH-BT13A-SE
VAX/VMS V4.0

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